Motivation:

* Bars are known to exist and we are still trying to learn a lot more about their evolution and what their purpose is in galaxies
* Galaxy Zoo Project –
  + Project asking civilian volunteers to categorize galaxies by answering a series of questions and then following machine learning
  + Tens of thousands of galaxies are categorized, and this includes specifications between bars (strong/weak and slow/fast)
* Many galaxies have bars but most focus on those which are strong and large since they are easiest to analyze
* Due to Galaxy Zoo, we now have access to many Bar galaxies with varied properties and now we can expand this to help find what differences these properties make
* Recently the star formation rate (SFR) in the center of galaxies with bars was found to vary
  + Strong + slow bars == high SFR
  + Weak + fast bars == low SFR
* There are simulations now which expect AGN and Supernovae rates also to be increased in bar galaxies with high SFR **(IS THIS TRUE?? )**
* Looking to see potential differences between strong/weak and fast/slow bars through observations to confirm simulation data

Methodology:

* Using the MaNGaA AGN catalogue to categorize galaxies with AGN and their strengths
* (Need to ask for how to make more detail out of this)